

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A multi-channel radio operating with multiple security levels, comprising:
  - more than one input, each input corresponding to a security level;
  - a first set of more than one processors, each of the processors in the first set of more than one processors is coupled to one of the inputs, each of the processors in the first set of more than one processors corresponding to the security level of the respective input; and
  - a second set of more than one processors coupled to the first set of more than one processors via a first common bus;
  - ~~wherein one of the processors of the first set of more than one processors encodes information received from the input to provide encoded information;~~
  - ~~wherein the encoded information is configured to be able to be decoded by devices corresponding to the security level of the one of the processors of the first set of more than one processors~~ wherein a first processor in the first set encodes and encapsulates data, a data source, and a destination address to generate an encrypted outbound packet, the first processor being configured to append a channel identifier onto the encrypted outbound packet to generate a channel encrypted outbound packet, the first processor being configured to append the data source and the destination address onto the channel encrypted outbound packet and re-encapsulate the channel encrypted outbound packet;
  - wherein a re-encapsulated channel encrypted outbound packet is configured to be able to be decoded by at least one processor assigned to the first security level in the second set, the re-encapsulated channel encrypted outbound packet being further configured to not be able to be decoded by at least one processor assigned to a second security level in the second set;
  - ~~wherein the first common bus is configured to direct the encoded information re-~~ encapsulated encrypted outbound packets to an intended ~~the at least one processor of the second~~

~~set of more than one processors, the intended processor corresponding to the security level and wherein the encoded information is not decodable by another processor of the second set of more than one processors corresponding to a different security level.~~

2. (Previously Presented) The multi-channel radio operating with multiple security levels of claim 1, wherein the first set of more than one processors are red processing devices.

3. (Previously Presented) The multi-channel radio operating with multiple security levels of claim 1, wherein the second set of more than one processors are black processing devices.

4. (Previously Presented) The multi-channel radio operating with multiple security levels of claim 3, wherein the first set of more than one processors are red processing devices.

5. (Original) The multi-channel radio operating with multiple security levels of claim 4, wherein the first common bus is an Ethernet packet switching device.

6. (Previously Presented) The multi-channel radio operating with multiple security levels of claim 4, wherein the first common bus is a PCI bus.

7-16. (Cancelled)

17. (Currently Amended) A multi-channel radio receiving information of different security levels, comprising:

a first set of processors, the first set of processors comprising a transform circuit, the transform circuit being configured to provide encoded data from a first channel, the encoded data being able to be decoded by processors assigned to the first channel, the encoded data is further not able to be decoded by processors assigned to a second channel, the first channel is configured to have a first information security level and the second channel is configured to have a second information security level;

a second set of processors, each of the second set of processors corresponding to either the first information security level and the second information security level; and

a common bus interface coupled between the first set of processors and the second set of processors, the common bus interface configured to isolate processors of the second set of processors based on the first information security level and the second information security level wherein the first processor encodes and encapsulates data, a data source, and a destination address to generate an encrypted outbound packet, the first processor being configured to append a channel identifier onto the encrypted outbound packet to generate a channel encrypted outbound packet, the first processor being configured to append the data source and the destination address onto the channel encrypted outbound packet and re-encapsulate the channel encrypted outbound packet, wherein a re-encapsulated channel encrypted outbound packet is configured to be able to be decoded by processors assigned to the first security level, the re-encapsulated channel encrypted outbound packet being further configured to not be able to be decoded by processors assigned to the second security level.

18. (Original) The multi-channel radio of claim 17, wherein the second set of processors comprise red processing devices.

19. (Original) The multi-channel radio of claim 17, wherein the common bus interface comprises a PCI bus.

20. (Original) The multi-channel radio of Claim 17, wherein the first set of processors comprise black processing devices.

21. (Currently Amended) A multi-channel radio operating with multiple security levels, comprising:

- a first input corresponding to a first security level;
- a second input corresponding to a second security level;
- a first output corresponding to the first security level;
- a second output corresponding to the second security level;

a first common bus coupled to the first input and the second input;

a first set of processors coupled to the first common bus, the first set of processors comprising a first processor corresponding to the first security level and a second processor corresponding to the second security level;

a second set of processors coupled to the first common bus, the second set of processors comprising a third processor corresponding to the first security level and a fourth processor corresponding to the second security level;

a second common bus coupled to the second set of processors, the first output, and the second output;

a first transceiver coupled to the first processor; and

a second transceiver coupled to the second processor;

wherein the first processor encodes and encapsulates [[a]] data, a data source, and a destination address to generate an encrypted outbound packet, the first processor being configured to append a channel identifier onto the encrypted outbound packet to generate a channel encrypted outbound packet, the first processor being configured to append the data source and the destination address onto the channel encrypted outbound packet and re-encapsulate the channel encrypted outbound packet;

wherein a re-encapsulated channel encrypted outbound packet ~~being configured is~~ configured to be able to be decoded by processors assigned to the first security level, the re-encapsulated channel encrypted outbound packet being further configured to not be able to be decoded by processors assigned to the second security level;

wherein the first common bus directs the re-encapsulated channel encrypted outbound packet to processors assigned to the first security level.

22. (Previously Presented) The multi-channel radio operating with multiple security levels of claim 21, wherein the second set of processors comprise red processing devices.

23. (Previously Presented) The multi-channel radio operating with multiple security levels of claim 21, wherein the first common bus interface comprises a PCI bus.

24. (Previously Presented) The multi-channel radio operating with multiple security levels of claim 21, wherein the first set of processors comprise black processing devices